**Spring boot**

1. **What is spring boot ?**

Spring boot makes it easy to create stand alone , production grade spring based application that we can just run.

1. **Why spring boot ?**

Spring boot is opinionated as user can decide which module they need

Convention over configuration as we do not need to configure all jars one by one.

Stand alone as spring provides built in apache tomcat server

1. **What spring boot framework do after starting the application ?**

* Sets up default configuration
* Starts spring application context
* Performs class path scan.
* Start tomcat server.

1. **Steps to create a new spring application**

* Add parent project

<parent>

<groupId>org.springframework.boot</groupId>

<artifactId>spring-boot-starter-parent</artifactId>

<version>1.4.2.RELEASE</version>

</parent>

* Add dependency web starter

<dependency>

<groupId>org.springframework.boot</groupId>

<artifactId>spring-boot-starter-web</artifactId>

</dependency>

* Create a main class and annotate it with two annotations

@SpringBootApplication

@ComponentScan(basePackages={"package where all beans exist"})

* Inside main method call

SpringApplication.*run*(CoureseApi.**class**, args);

CourseApi is the main class name

* Create controller class or any other service classes inside the package mentioned inside component scan annotation

1. **How to create a spring boot application by spring initializr**

* Go to start.spring.io
* Choose your option and add dependencies like web, jpa, security etc.

1. **How to configure a spring boot application ?**

Configure server port, consul , discovery client and lots more

Create a file application.properties inside src/main/resources

Find all the keys in this below link

<https://docs.spring.io/spring-boot/docs/current/reference/html/common-application-properties.html>

1. How to start the boot application outside the IDE

Go to target folder of the project and run

Java –jar application-name.jar

1. How to get health and beans information

Add actuator and query with localhost:8080/health

Add management.port = 9001 to change the server port for actuator